# VIBRATION ANALYZER

## PCE-VT 3800S




- **Data logger function**
- **Automatic ISO 10816-3 evaluation**
- **Measuring range up to 399.9 m/s² / 15744 in/s²**
- **Hand-held device for mobile vibration measurement**
- **Rechargeable battery**
- **2.48" LC display**

The vibration analyzer is the ideal companion for checking vibrating parts, machines and plant. With the external vibration sensor of the vibration meter, the vibration displacement up to 3.9 mm, the vibration velocity up to 399.9 mm/s and the vibration acceleration up to 399.9 m/s² can be determined. RMS, peak, peak-to-peak and crest factor are available as measurement parameters on the vibration meter. Another function of the vibration measuring device is the automatic evaluation according to ISO 10816-3. Accordingly, the vibration meter can determine the current vibration state of a machine via a good/bad evaluation. This means that the vibration meter is used, for example, for repair and maintenance work on machines. The built-in LiPo battery with a capacity of 2500 mAh allows a battery life of up to 20 hours. The LiPo battery can be recharged via the micro-USB interface on the vibration measuring device.

In order to process the measured values further, they can be saved directly on the vibration analyzer. An internal memory is available for this. The measured values can be saved manually as well as automatically by the vibration measuring device. After a measurement, the recorded measured values can be read out on a PC. The software for the vibration meter can be used to analyse the measured data using the graphic display and tabular listing. The measurement data can be exported as a CSV file for further processing.

## Specification

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| **Acceleration** | |
| Measuring range | 0 ... 399,9 m/s² |
| Resolution | 0,1 m/s² |
| Accuracy | ±2% @160 Hz |
| Frequency range | 10 Hz ... 10 kHz<br>1 kHz ... 10 kHz |
| **Speed** | |
| Measuring range | 0 ... 399,9 mm/s |
| Resolution | 0.1 mm/s |
| Accuracy | ±2% @160 Hz |
| Frequency range | 10 Hz ... 1 kHz |
| **Path** | |
| Measuring range | 0 ... 3,9 mm |
| Resolution | 1 µm |
| Accuracy | ±2% @160 Hz |
| Frequency range | 10 Hz ... 200 Hz |
| **Sensor** | |
| Designation | PCE-VT 3xxxS |
| Additional description | Resonance frequency: 24 kHz Crossover sensitivity: Δ 5% Destruction limit: 5000 g (peak) Housing material: stainless steel and plastic Mounting thread: ¼ - 28 UNF |
| Dimension | Ø 29 x 81 mm |

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|---|---|
| **General technical data** | |
| Number of measuring channels | 1 |
| Measuring functions | RMS, peak, Peak-peak, Crest factor |
| Frequency | 10 ... 10000 Hz |
| Display type | LCD |
| Display size | 2,8 Inch |
| Storage medium | Internal memory |
| Storage capacity | 2160000 Values |
| Storage interval from | 1 s |
| Storage interval to | 12 min. |
| Interface | Micro-USB |
| Standard(s) | ISO 10816-3 |
| Menu language | English, German, French, Spanish, Italian, Dutch, Portuguese, Turkish, Polish, Russian, Chinese, Japanese |
| Protection class (device) | IP52 |
| Power supply | 5 V DC, 500 mA |
| (Rechargeable) battery | 1 x 3,7 V LP785060 , Lithium polymer battery |
| Capacity | 2500 mAh |
| Performance | 9,25 Wh |
| Operating conditions | -20 ... 65 °C , 10 ... 95 % RH |
| Storage conditions | -20 ... 65 °C , 10 ... 95 % RH |
| Dimensions ( L x W x H ) | 165 x 85 x 32 mm |
| Weight | 253 g |